WHAT IS CLAIMED IS:

1. A zeolite having a mole ratio of silicon oxide to aluminum oxide greater than about 20:1 to less than 40:1, with crystallites having small broad lathe-like components in the range of 200-400A, and having the x-ray diffraction lines of Table 1.

2. The zeolite of claim 1, having an Argon adsorption ratio (defined as the fraction Ar adsorption at 87K between the relative pressures of 0.001 and 0.1) / (total Ar adsorption up to the relative pressure of 0.1) that is greater than 0.5, with a minimum micropore volume of 0.02 cc/gm for the zeolite.

3. The zeolite of claim 2, wherein the Argon adsorption ratio is in the range from 0.55 to 0.70.

4. The zeolite of claim 1, having an external surface area in the range from 80 to 300 m^2/gm.

5. A method of preparing a dewaxing catalyst suitable for use in a process for dewaxing a hydrocarbon feed to produce an isomerized product, said catalyst possessing less defined crystallinity, reduced micropore volume, increased surface area and reduced cracking activity over other intermediate pore size molecular sieves used for isomerization, the feed including straight chain and slightly branched chain paraffins having 10 or more carbon atoms, the method of preparation comprising the following steps:

(a) synthesizing a zeolite having a mole ratio of silicon oxide to aluminum oxide greater than greater than about 20:1 to less than 40:1, with crystallites having small broad lathe-like components in the range of 200-400A, and having the x-ray diffraction lines of Table 1 by employing the following steps:

(i) combining the following reagents in the amounts specified to form a mixture:

(1) 5 parts of an N-lower alkyl –N-methyl –N'-isopropyl-imidazolium cation which has been ion-exchanged to the hydroxide form;

(2) 20 parts of an alkali metal hydroxide;

(3) 100 parts of S_iO_2 to 3.5 parts of Al_2O_3;

(4) 20 parts of an alkyl amine.

(ii) stirring the mixture of step (i) in an autoclave, under autogenous pressure, in a range of from 500 to 1500 rpm for a period of from 0 to 5 hours;

(iii) maintaining the mixture at an elevated temperature for a period of from 40 to120 hours to form the crystals of the zeolite;

(iv) collecting the crystals of the zeolite by filtration or centrifugation;

(v) subjecting the crystals to calcinations and ion-exchange;

(b) mixing the zeolite synthesized in stage (a) with a refractory inorganic oxide carrier precursor and an aqueous solution to form a mixture, the mixture having a molecular sieve content from about 10 to about 90 wt%;

(c) extruding or forming the mixture from step (b) to form an extrudate or formed particle;

(d) drying the extrudate or formed particle of step (c);

(e) calcining the dried extrudate or formed particle of step (d);

(f) loading of the extrudate or formed particle of step(d) with a hydrogenation component or other modifying metal or metals to prepare a catalyst precursor;

(g) drying the catalyst precursor of step (f);

(h) calcining the dried catalyst precursor of step (f) to form a finished bound dewaxing catalyst.

6. A dewaxing catalyst prepared by the method of claim 5.

7. The method of claim 4, wherein the zeolite is SSZ-32X.

8. The method claim 5 (f) where other modifying metals are selected from the groups consisting of magnesium, lanthanum, and other rare earth metals, barium, sodium, praseodymium, strontium, potassium, neodymium and calcium.

9. A zeolite prepared from an aqueous solution having a composition, as synthesized and in the anhydrous state, in terms of mole ratios of oxides as follows: (0.05 to 2. 0)Q_2O:(0.1 to 2.0)M_2 O: $Al._2$ O_3 (20 to less than 40) S_iO_2 wherein M is an alkali metal cation, and Q is the sum of Q_a an N-lower alkyl- N'- isopropylimidazolium cation ,and Q_b, an amine, the zeolite having the X-ray diffraction lines of Table 1, wherein the molar concentration of Q_b is greater than the molar concentration of Q_a.

10. The zeolite of claim 9 wherein Q_a is selected from the group consisting of N-methyl-N'-isopropyl –imidazolium cation and N,N'-diisopropyl-imidazolium cation.

11. The zeolite of claim 9, wherein Q_b is selected from the group consisting of isopropyl, ,isobutyl, isopentyl ,neopentyl or monoethyl amine.

12. The zeolite of claim 9 which has a constraint index in the range from 8 to 30.

13. The zeolite of claim 9, which has a silica/alumina ratio in the range from 20 to 40.

14. The zeolite of claim 9, which is prepared by thermal treating the zeolite at a temperature of from 200°C (392°F) to 820°C (1508°F).

15. The zeolite of claim 9 which is ion exchanged with hydrogen, ammonium, rare earth metal, Group IIA metal or Group VIII metal ions.

16. The zeolite of claim 9, wherein rare earth metals, Group IIA metals, or Group VIII metals are occluded in the zeolite.

17. The zeolite of claim 9, which contains modifying metals selected from the groups consisting of magnesium, lanthanum, and other rare earth metals, barium, sodium, praseodymium, strontium, potassium, neodymium and calcium.

18. The process for dewaxing a hydrocarbon feed thereby producing a maximized yield of isomerized product and a minimized yield of light ends, the feed including straight chain and slightly branched paraffins having 10 or more carbon atoms, comprising contacting the feed under isomerization conditions in the presence of hydrogen with catalyst

comprising an intermediate pore size molecular sieve which is prepared according to the following steps:

(a) synthesizing a zeolite having a mole ratio of silicon oxide to aluminum oxide greater than greater than about 20:1 to less than 40:1, with crystallites having small broad lathe-like components in the range of 200-400A, and having the x-ray diffraction lines of Table 1 by employing the following steps:

(i) combining the following reagents in the amounts specified to form a mixture:

(1) 5 parts of an N-lower alkyl –N-methyl –N'-isopropyl-imidazolium cation which has been ion-exchanged to the hydroxide form;

(2) 20 parts of an alkali metal hydroxide;

(3) 100 parts of S_iO_2 to 3.5 parts of Al_2O_3;

(4) 20 parts of an alkyl amine.

(ii) stirring the mixture of step (i) in an autoclave, under autogenous pressure, in a range of from 500 to1500 rpm for a period of 0.5 to 5 hours ;

(iii) maintaining the mixture at an elevated temperature for a period of from 40 to 120 hours to form the crystals of the zeolite;

(iv) collecting the crystals of the zeolite by filtration or by centrifugation;

(v) subjecting the crystals to calcination and ion-exchange.

(b) mixing the zeolite synthesized in stage (a) with a refractory inorganic oxide carrier precursor and an aqueous solution to form a mixture, the mixture having a molecular sieve content from about 10 to about 90 wt%;

(c) extruding or forming the mixture from step (b) to form an extrudate or formed particle ;

(d) drying the extrudate or formed particle of step (c);

(e) calcining the dried extrudate or formed particle of step (d) ;

(f) loading of the extrudate or formed particle of step(d) with a hydrogenation component to prepare a catalyst precursor

(g) drying the catalyst precursor of step (f);

(h) calcining the dried catalyst precursor of step (f) to form a finished bound dewaxing catalyst.

19. The dewaxing process of claim 18, wherein the zeolite is SSZ-32X.

20. The dewaxing process of claim 19, employing a zeolite prepared from an aqueous solution having a composition, as synthesized and in the anhydrous state, in terms of mole ratios of oxides as follows: (0.05 to 2.0)Q_2O:(0.1 to 2.0)M_2 O: Al_2O_3 (20 to less than 40) S_iO_2 wherein M is an alkali metal cation, and Q is the sum of Q_a an N-lower alkyl- N'-isopropylimidazolium cation, and Q_b, an amine, the zeolite having the X-ray diffraction lines of Table 1, wherein the molar concentration of Q_b is greater than the molar concentration of Q_a.

21. The process of claim 19, wherein Q_a is selected from the group consisting of N-methyl-N'-isopropyl –imidazolium cation and N,N'-diisopropyl-imidazolium cation.

22. The process of claim 19, wherein Q_b is selected from the group consisting of isopropyl, isobutyl, isopentyl, neopentyl or monoethyl amine.

23. The process of claim 19, wherein the zeolite has a constraint index in the range from 8 to 30.

24. The process of claim 19, wherein the zeolite has a silica/alumina ratio in the range from 20 to 40.

25. The process of claim 19, wherein the zeolite is prepared by thermal treating at a temperature of from 200°C (392°F to 820°C (1508°F).

26. The process of claim 19, wherein the zeolite is ion exchanged with hydrogen, ammonium, rare earth metal, Group IIA metal or Group VIII metal ions.

27. The process of claim 19, wherein rare earth metals, Group IIA metals, or Group VIII metals are occluded in the zeolite.

28. The process of claim 19, wherein said feed is selected from the group consisting of hydrotreated or hydrocracked gas oils, hydrotreated lube oil raffinates, brightstocks, lubricating oil stocks, synthetic oils, foots oils, Fischer-Tropsch synthesis oils, high pour point polyolefins, normal alphaolefin waxes, slack waxes, deoiled waxes and microcrystalline waxes.

29. The process of claim 27, wherein Group VIII metals are selected from the Group consisting of platinum and palladium, and/or mixtures thereof.

30. The process of claim 19 wherein said contacting is carried out at a temperature of from 450 - 800°F, and a pressure in the range from about 15 psig to about 3000 psig.

31. The process of claim 30, wherein said pressure is in the range from about 100 psig to about 2500 psig.

32. The process of claim 21, wherein the liquid hourly space velocity during contacting is from about 0.1 to about 20.

33. The process of claim 32, wherein the liquid hourly space velocity is from 0.5 to about 5.

34. The process of claim19, wherein the hydrocarbon feed is hydrotreated prior to isomerization at a temperature in the range from 325 to 800° F.

35. The process of claim 19, further comprising a hydrofinishing step following isomerization.

36. The process of claim 35 , further comprising hydrofinishing of isomerized product.

37. The process of claim 36, wherein hydrofinishing is carried out at a temperature in the range from about 325 to about 590° F and a pressure in the range from about 400 psig to about 3000 psig.